

Abstract of the Disclosure

An apparatus and method is disclosed for attaching a data sub-channel to a digital payload data stream having a clock signal for communicating supplemental data within an optical communications network. At an upstream site the clock signal is phase-modulated with an encoded supplemental data stream to generate a phase-modulated sub-channel. The phase-modulated clock is used to time the payload data stream so as to superimpose the phase-modulated sub-channel onto the payload data stream. At a downstream site the sub-channel is recovered and the clock signal is used to retime the payload data stream. The sub-channel is then demodulated and the supplemental data stream decoded.